

CATALYST

Record Your Science Finds With Sun and Copier



This geranium leaf was recorded xerographically.

"Phew-ew! That ammonia is really strong!" complained Charlie.

"It has to be strong," Susie answered calmly. She was carefully pouring a small amount of ammonia into a coffee can. "This ammonia has a hard job to do."

Were these teenagers practicing a cleanser commercial? No. They were making "sun prints" with a special paper called *Ozolid* paper. (Ozolid paper must be kept in a lightproof envelope.) Ammonia fumes are used to develop the paper, much as prints are made in ordinary photography. But you don't need a darkroom or a lot of expensive equipment.

You can get Ozolid paper at a drafting supply store or blueprint shop.

Getting Started

"To make a print," Susie be-

PHOTO CREDITS: Page 1, Wide World; p. 2, (left) NASA, (right) Alan West, XEP art by J. Carnicelli; p. 4, "An Exxon Photo"; p. 5, Wide World; p. 6, (top left) Univ. of Calif., Berkeley, (top right) UPL (left center) Wide World, (right center) UPL; p. 7, (bottom left) Westinghouse, (center) Wide World, (bottom right) Wide World; p. 8, XEP photo by E. Steinkamp, XEP art by Wayne Blickenstaff; p. 9, (left) ABC-TV, (center) XEP photo by Eberhard Luetheke, (right) Pictorial Parade.

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gins, "first tape one edge of a 25 x 25 centimeter (10 inch x 10 inch) square glass pane to a wood board. The tape acts like a hinge.

"Then," Susie adds, "you put a piece of Ozalid paper, yellow side up, under the glass. Then put a tree leaf between the glass and the paper and squash the glass down on the leaf."

"Good," says Charlie. "You may pass science yet."

"You expose the whole business to sunlight for about one minute," Susie continued. "The exposed yellow Ozalid paper turns white when it's done."

"Will it do rocks, fossils, insects, and stuff like that?"

"Sure, just put the rock on the paper and don't close the glass over it.

"Now watch, Charlie. I put some stones in the bottom of this empty can. Now I pour about

a tablespoon of this concentrated ammonia into the can. Remember, I got the ammonia at the drafting supply store where I bought the Ozalid paper."

"Now you're putting the ex-

posed paper into the coffee can . . ."

"But don't let the paper touch the liquid ammonia! The ammonia *fumes* do the developing! Cover the can tightly with its plastic cover. Let the paper develop for a minute or so . . ."

"Hey, that's a really neat print, Susie! The leaf part turned dark blue, and the background's white. Not bad!"



Grape ivy leaf. Both leaf copies were made with a Xerox 4000 copier.

Copying Machine Too

"OK. Now what about the office-copier method of making leaf prints?"

"That's easy. Just put the leaf on the glass pane on the copying machine. Cover the leaf with a sheet of white paper and make a print. You can make copies of stuff like rocks too. Only it doesn't smell bad!"

"Oh, brother!"

—Leonard A. Phillips

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